## What is the Problem?

Over 2 million small dams block the passage of migratory fish in U.S. streams and rivers. Dams provide numerous benefits for modern society, but they also contribute to the habitat degradation occurring in estuaries, deltas, and river environments. While most U.S. dams serve their intended functions, many no longer provide the benefits for which they were built. Still others have outlived their planned life expectancy and present known safety hazards and liability risks to communities. There are other barriers to fish passage as well. "Perched" culverts, whose downstream ends sit too high above the stream, block fish passage. Culverts that are too narrow, too steep, or collapsed can present impassible obstacles for migratory fish trying to reach their spawning grounds.

## Removing Dams and River Blockages

Using a community-based model, NOAA has removed more than 80 dams and stream blockages, opening 700 miles of high quality river habitat for migratory fish. These restoration projects provide significant environmental improvements (e.g. opening access to spawning habitat and improving water quality) and offer noteworthy economic and societal benefits. They create new opportunities for recreational fishing, river rafting, and kayaking; provide cost savings by eliminating the need for dam repairs; and remove safety and liability risks associated with outdated structures.

Removing dams and other barriers requires substantial time and effort because of environmental, safety, and sociocultural considerations. All barrier removal projects benefit from a collaborative process that engages a wide array of partners, including municipalities, state government, and private owners. Partnerships help build the tools, confidence, and interest required to achieve successful river restoration projects.

## **NOAA's Open Rivers Initiative**

To help repair vital riverine ecosystems, to benefit communities, and to enhance populations of key trust species, NOAA plans to initiate a competitive grant program focused on community-driven, small dam and river barrier removals in coastal states. These efforts are expected to provide an economic boost for communities, enhance public safety, and improve populations of NOAA trust resources such as striped bass, Atlantic and shortnose sturgeon, Atlantic and Pacific salmon, American eel, American shad, blueback herring, and alewife. More information can be found at http://conservationconference.noaa.gov.



New Hampshire's West Henniker dam before removal.



New Hampshire's West Henniker dam during removal

